What is claimed is:

1. An inline phase shifter comprising:

a waveguide having a waveguide path; and

at least one electromechanical means for changing a physical dimension of the waveguide path to phase shift a signal which travels along the waveguide path.

2. The inline phase shifter according to claim 1, wherein the electromechanical means is a set of first and second electromechanical devices arranged at a point along the waveguide path and other sets of electromechanical means are positioned at other points along the waveguide path.

3. The inline phase shifter according to claim 1, comprising:

a first surface of the waveguide parallel to a second surface of the waveguide;

a first electromechanical means positioned adjacent to the first surface; and

a second electromechanical means positioned adjacent to the second surface.

4. The inline phase shifter according to claim 3, wherein the first electro-mechanical means has a first shutter that can move toward the second surface and the second electro-mechanical means has a second shutter that can move toward the first surface.

5. The inline phase shifter according to claim 4, wherein there is an opening

normal to the waveguide path between the first and second electromechanical devices.

6. The inline phase shifter according to claim 5, wherein the first and second electromechanical devices are positioned within the waveguide.

7. A radar system having an inline phase shifter according to claim 1, wherein the inline phase shifter is connected to a radar transceiver for phase shifting one of transmitted and received signals.

8. A method for phase shifting a signal comprising:

changing physical dimensions of a waveguide path by actuating an electromechanical device; and

inputting a signal along the waveguide path to output a phase shifted signal.

9. The method for phase shifting a signal according to claim 8, comprising:

sending an actuation signal to the electromechanical device positioned adjacent to a waveguide containing the waveguide path.

10. An inline phase shifter comprising:

a waveguide having a waveguide path; and

a first plurality of electromechanical devices positioned serially along the

waveguide path sufficiently adjacent to the waveguide path to change a physical dimension of the waveguide path upon actuation of at least one of the plurality of electromechanical devices.

11. The inline phase shifter according to claim 10, wherein the first plurality of electro-mechanical devices is positioned within the waveguide.

12. An inline phase shifter comprising:

a waveguide having a waveguide path; and

at least one of a micro-electromechanical device and a piezoelectric device positioned sufficiently adjacent to the waveguide path to change a physical dimension of the waveguide path upon actuation of the at least one device.

13. The inline phase shifter according to claim 12, comprising:

a waveguide having a first surface and a second surface parallel to the waveguide path;

a first device positioned adjacent to the first surface; and

a second device positioned adjacent to the second surface.

14. The inline phase shifter according to claim 13, wherein the first and second devices are a set of devices arranged at a point along the waveguide path, and other sets of devices are positioned at other points along the waveguide path.

15. The inline phase shifter according to claim 13, wherein the first device has a first shutter that can unroll toward the second surface and the second device has a second shutter that can unroll toward the first surface.

16. The inline phase shifter according to claim 15, wherein there is an opening normal to the waveguide path between the first and second shutters.

17. The inline phase shifter according to claim 13, wherein the first and second devices are positioned within the waveguide.

18. The inline phase shifter according to claim 12, comprising:

a waveguide having a first surface and a second surface parallel to the waveguide path;

a first array of devices positioned adjacent to the first surface;

a second array of devices positioned adjacent to the second surface; and

wherein the first devices have first shutters that can move toward the second surface and the second devices have second shutters that can move toward the first surface.

19. The inline phase shifter according to claim 18, wherein there is an opening normal to the waveguide path between the first and second arrays of devices.

20. The inline phase shifter according to claim 19, wherein the first and second arrays are a set of devices arranged at a point along the waveguide path and other sets of devices are respectively positioned at other points along the waveguide path.